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State of Utah
DEPARTMENT OF NATURAL RESOURCES
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DOGM
MINERALS PROGRAM
FILE COPY

m/049/006

September 15, 1989

Mr. George Beamer
Product Development Engineer
Interpace Industries, Incorporated
Mica, Washington 99023

George
Dear ~~Mr. Beamer~~:

Re: Reclamation Estimate for the Clinton Mine, Utah County, Utah

I appreciated the opportunity to meet with you on-site and re-evaluate the reclamation obligation based on your recent earth work. The regrading work you have performed this summer is excellent. As I mentioned in a phone conversation with you yesterday, I am surprised at the extent of the area covered by this earthwork (17 acres).

Attached is a file memo on the site inspection. This includes a suggested seed mix to use on the regraded areas. To include enough seed to apply to the bottom and slopes of the Narrow Cut, which will have to be broadcast by hand, I suggest you purchase at least 200 pounds of seed mix.

Also attached is an adjusted reclamation estimate and map for this site. With your recent regrading work, the new estimate is \$52,000 (1994 dollars). Please review these figures and map for completeness and accuracy.

As I mentioned in the field, either Holland Shepherd, the soils specialist for the minerals program, or I will want to be onsite during seed application this fall. Holland suggests you wait until the week of October 23 to apply the seed.

This adjusted estimate will reduce the total liability for both the Clinton and Pleasantview Mines to \$80,000. I will get back with you and Ron McFadden when the proper forms are available to handle your surety. In the meantime, let me know when you schedule the revegetation.

Sincerely,

Scott Johnson
Reclamation Engineer

jb
Attachments
cc: Lowell Braxton
Holland Shepherd
MN18/79

Reclamation Estimate for Interpace Industries, Inc.
Clinton Site Utah County M/049/006

Prepared By Utah State Division of Oil, Gas and Mining
September 14, 1989

Description	Quantity	Unit	\$/Unit	Cost (\$)
Lehi Cut Reclamation				
Reduce Highwalls and Regrade (a)		Lump Sum		3,000
Backfill Waste Material into Cut	15,000	Cubic Yards	0.80	12,000
Revegetate	4.6	Acres	220	1,010

Subtotal				16,010
West Cut Reclamation				
Regrade for Uniformity (b)	3.0	Acres	400	1,200
Revegetate	4.9	Acres	220	1,080

Subtotal				2,280
North Cut Reclamation				
Reduce Highwalls and Regrade (c)		Lump Sum		2,000
Revegetate	7.0	Acres	220	1,540

Subtotal				3,540
Other Reclamation				
Level Clay and Reload Pads (d)	20,000	Cubic Yards	0.60	12,000
Rip Clay and Reload Pads	3.0	Acres	300	900
Regrade Gravel Borrow Area at West Cut	0.6	Acres	400	240
Rip Roads	6.0	Acres	300	1,800
Revegetate	9.6	Acres	220	2,110

Subtotal				17,050
Revegetation of 1989 Reclamation				
Revegetate (e)	17.0	Acres	220	3,740
				=====
Totals	43.1	Acres		42,620
Add Contingency (10%)				4,260

TOTAL RECLAMATION COST (1989 Dollars)				46,880
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				52,000

- Notes: (a) The Lehi Cut will be filled with the waste rock from the North Cut as the North Cut progresses. This cost for reducing the highwalls will eventually be eliminated.
- (b) The West Cut will eventually be mined 15 feet deeper. Although this pit is mostly pre-law, the operator has dug trenches to determine clay quality. The operator will 'cut and fill' during production in this pit to eliminate the highwalls. The cost for reducing the highwalls will eventually be eliminated.

Reclamation Estimate for Interpace Industries, Inc.
Clinton Site Utah County M/049/006










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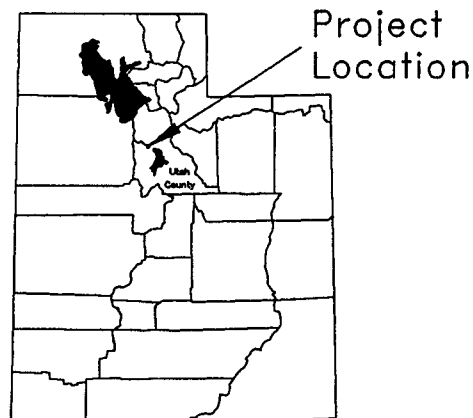
- Notes: (c) The North Cut will be the next production site. The operator will haul much of the waste to the Lehi Cut. During production, the operator will 'cut and fill' to eliminate highwalls. This cost for reducing the highwalls will eventually be eliminated.
- (d) Although it is unlikely an operator would leave a marketable commodity on the ground at termination of operations, the Division must assume a worse-case scenerio, and apply reclamation costs.
- (e) The operator has regraded and will seed 17 acres in 1989. Until the revegetation is determined to be successful, this liability will remain.

Cost Parameters Used

D-8 Dozer (O&O)	160	\$/hour		
988B Wheel Loader (O&O)	165	\$/hour		
Labor Only	24	\$/hour		
Farm Tractor (O&O)	67	\$/hour		
Speed	4	mph		
Width of Pass	6	feet		
Revegetation Cost per Acre	Quantity	Unit	\$/Unit	Total Cost (\$)
Bare Costs				
Fertilizer (18-46-0)	200	Pounds	0.25	50
Seed Mix *	10	Pounds	12	120
Subtotal				----- 170
Application Costs				
Fertilizer (broadcast by hand)	0.5	Hours	24	12
Seed Mix (drilled)	0.5	Hours	30	15
Scarify (tractor with chain)	0.3	Hours	67	23
Subtotal				----- 50
Total Revegetation Cost per Acre				220

* This is the mix required for drill application. If the seed mix is broadcast with a hand spreader, the application amount will be doubled to 20 pounds per acre.

-  Pre-Law Pits (18 acres)
-  Pre-Law Spoil and Backfill (6 acres)
-  Pits Mined Following 1975 Act (10 acres)
-  Spoil Placed Following 1975 Act (1 acre)
-  Clay and Reload Pads (3 acres)
-  Topsoil Stockpiles (2 acres)
-  1989 Reclamation (17 acres)
-  Roadways (6 acres)
-  Projected Expansion of Pits (9 acres total)



Interpace Industries, Inc
Clinton Mine

Utah County, Utah

OGM File: M/049/006

Map Compiled January 6, 1985
Changed September 14, 1989



State of Utah
Natural Resources
Oil, Gas and Mining

